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# **MICHIGAN CLEAN AIR CONSULTANT DIRECTORY**



## **6<sup>th</sup> EDITION**

**Michigan Department of Environmental Quality  
Environmental Science and Services Division  
Environmental Assistance Program  
800-662-9278**

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## MICHIGAN CLEAN AIR CONSULTANT DIRECTORY

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# INTRODUCTION



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# MICHIGAN CLEAN AIR CONSULTANT DIRECTORY

## INTRODUCTION

Thank you for your interest in our *Michigan Clean Air Consultant Directory, Sixth Edition (Directory)*. The Environmental Science and Services Division (ESSD) of the Michigan Department of Environmental Quality (MDEQ) developed this *Directory* to provide a basic list of statewide air quality consultants, industrial hygienists, and analytical laboratories that perform varying levels of outdoor air pollution or indoor air quality control work and have one or more offices physically located in Michigan. This *Directory* is by no means an inclusive listing of all of the state's air quality consultants, industrial hygienists, and analytical laboratories. Rather, the entities listed in this *Directory* have consented to be a part of this publication. Each entry contains the consultant's own description, representing the expertise of their qualifications, specialties, staffing, and other experience.

**Please note: the state of Michigan, MDEQ, does not recommend or endorse the services or products of any particular company listed herein. The quality of service provided by each company is not known or implied by this listing. The MDEQ, by providing this *Directory*, does so as a courtesy to business, industry, and the general public; and it does not represent that the companies are, or are not, in compliance with or knowledgeable about all applicable federal, state, and local environmental laws. We encourage you to use the *Directory's* contents as a starting point in finding a solution to your environmental or health-related problem.**

The *Directory* is available on the Web. For the most current version of the *Directory*, please visit the MDEQ's Web site at:

**[www.michigan.gov/deqair](http://www.michigan.gov/deqair)**

At the MDEQ Web site select "Clean Air Assistance" from the drop down menu under the "Air" category. On the "Clean Air Assistance" page, select "Environmental Consultant Assistance" from the center menu under "Information."

The *Directory* is divided into six helpful sections:

**Section I:    Understanding the Differences Between Outdoor and Indoor Air Pollution**

Section I explains the differences between outdoor and indoor air pollution, explains which federal and state agencies regulate each type of air pollution, and lists applicable air quality consultants along with the services they provide.

## Section II: The Air Quality Service Locator

Section II provides a reference table that allows readers to quickly locate statewide air quality consultants, industrial hygienists, and analytical laboratories according to the specific type(s) of air pollution control or air quality services and activities they perform.

### Section III: Air Quality Consultants

### Section IV: Industrial Hygienists

## Section V: Analytical Laboratories

Sections III through V contain lists of air quality consultants. Each entry includes the company's name, location, and contact information, along with a short introduction to or description of the company. The entry also includes a simple chart entitled, "Types of Air Quality Services Available" that shows which types of indoor or outdoor air quality services are available from the respective company based on the activity descriptions found in Section I. If applicable, each company entry also contains a list of branch office affiliations in the state for an alternate means of contact.

**Section VI: County Listing of Air Quality Consultants, Industrial Hygienists, and Analytical Laboratories**

For those looking for an air quality professional within their geographic proximity, Section VI lists the *Directory's* air quality professionals sorted alphabetically by Michigan county location.

## OTHER HELPFUL RESOURCES

Selecting a consultant to solve an outdoor or indoor air quality problem can be a very difficult and time consuming process. In an effort to help businesses and individuals select the most appropriate environmental professional to accomplish certain tasks, the ESSD of the MDEQ has developed an additional resource entitled, ***Working with An Environmental Consultant***. This guidance publication is a separate yet complementary fact sheet that can be used in conjunction with this *Directory*.

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Some of the highlights of this publication include:

- Help in determining when an environmental professional is needed.
- A description of the types of environmental consultants that are available and the types of work each may perform.
- Tips for the selection of, contract negotiation with, and management of these environmental professionals.
- A list of organizations that provide support services for the clients of contractual consultants.
- General guidance checklists and sample questionnaires that can be used to evaluate and compare the services of various types of multimedia environmental professionals.

Other helpful online resources for solving indoor air quality problems are offered by the American Industrial Hygiene Association (AIHA) and the U.S. Environmental Protection Agency (USEPA).

AIHA provides a list of consumer brochures that talk about some common indoor air quality problems, how to detect them, and what solutions are available to resolve them. The AIHA consumers' brochures are located at:

[www.aiha.org/Content/AccessInfo/consumer/consumerbros.htm](http://www.aiha.org/Content/AccessInfo/consumer/consumerbros.htm)

or by contacting AIHA directly at:

2700 Prosperity Ave., Suite 250  
Fairfax, VA 22031  
Telephone: (703) 849-8888

Studies of air pollution conducted by the USEPA estimate that indoor levels of pollutants may be 2-5 times, and in some cases more than 100 times, higher than outdoor levels. These levels of indoor air pollutants may be of particular concern because most people spend about 90 percent of their time indoors. To provide a better awareness of these pollutants, the USEPA's Web site offers a number of guidance publications, a list of frequently asked

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questions, hotline numbers, and background information on air quality related topics such as asthma, mold/moisture, and radon. The USEPA's Indoor Air Quality Web site is located at:

[www.epa.gov/iaq/index.html](http://www.epa.gov/iaq/index.html)

Guidance publications can also be obtained by contacting USEPA directly at:

U.S. Environmental Protection Agency  
National Service Center for Environmental Publications (NSCEP)  
P.O. Box 42419  
Cincinnati, OH 45242-0419  
Telephone: (800) 490-9198

# SECTION I



## UNDERSTANDING THE DIFFERENCES BETWEEN OUTDOOR AND INDOOR AIR POLLUTION



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### SOURCES AND REGULATION OF AIR POLLUTION

Air pollutants can be generated by a variety of outdoor or indoor sources and can affect the overall quality of public health and the environment. Air pollutants have many sources, some of which may be obvious such as:

- Combustion sources that emit pollutants through smokestacks.
- Automobile and diesel exhaust emissions.
- Dust generated from renovation, remodeling, or construction work.

Other sources of air pollution that are not so obvious can come in the form of:

- Fumes from paints, solvents, and the installation of new furnishings or finishes.
- The application of pest control chemicals.
- Dust and fungi generated from general building maintenance or housekeeping activities.

### OUTDOOR AIR QUALITY CONSULTANTS

Air quality consultants work to regulate or maintain air pollution that can impact public health and the outside environment. The following are the four most common types of outdoor air quality consultants and the activities they conduct.

#### General Air Pollution Consultants

The most common type of air quality consultant is the **General Air Pollution Consultant** who works primarily with industrial and commercial companies to provide solutions for the control of outdoor air pollution. These consultants offer technical support for compliance with federal, state, and local environmental laws and regulations. General air pollutant consultants conduct a variety of all-purpose outdoor air pollution control activities. Some of the most common include:

- Determining the applicability of various regulatory requirements under state and federal air pollution control regulations (i.e., New Source Performance Standards [NSPS], National Emission Standard for Hazardous Air Pollutants [NESHAP], state offset requirements, and the Prevention of Significant Deterioration [PSD] program) to business and industry.



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Environmental consultants who qualify as source samplers either send samples to an off-site laboratory for analysis or have an analytical laboratory on site.

### Ambient Air Monitors

A third type of outdoor air quality consultant can be classified as an **Ambient Air Monitor**. These outdoor air quality consultants are called upon to monitor or sample on behalf of an industrial or commercial company as required:

- Under Part D (the PSD requirements) of the Clean Air Act Amendments for certain major new stationary industrial sources and major industrial modifications to an existing air quality permit subject to a preconstruction review.
- For hazardous waste disposal facilities (under Michigan Public Act 451 of 1994, Part 111).
- As part of an air permit or consent order judgment.

Consultants who conduct ambient air monitoring and sampling have strong knowledge of the USEPA's quality assurance requirements of Title 40, Part 58 of the *Code of Federal Regulations*.

### Continuous Emission and Continuous Opacity Monitors

A fourth type of outdoor air quality consultant provides **monitoring services for emission (CEMS) and opacity (COMS) monitors**. These continuous monitors are attached to industrial sources to measure levels of air pollution in a process. The types of CEMS/COMS activities that are typically conducted by air quality consultants include certifying the performance specifications for industrial continuous monitoring systems by:

- Developing and submitting pre-installation monitoring plans.
- Conducting quality assurance testing of instrumentation (i.e., Relative Accuracy Test and Cylinder Gas Audits).
- Generating excess emission and certification reports on behalf of a facility.

Environmental consultants and professionals conducting performance tests for CEMS or COMS should have strong knowledge of the requirements under Title 40, Part 60, Appendix B of the *Code of Federal Regulations*.

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Other air quality professionals who are utilized based on their specialized area of expertise include:

- **Process Consultants** who focus their expertise on modifying the existing *process* equipment (for example in a manufacturing facility) to lower the type or amount of air contaminant emissions from that process.
- **Product/Equipment Vendors** who sell new or replacement components for process and/or air quality control equipment.
- **Environmental Attorneys** who, although not officially designated as an "environmental consultant," specialize in environmental law, often helping individuals and businesses determine the economic and legal impact of problems resulting from air pollution.

### REGULATION OF OUTDOOR AIR POLLUTION

Outdoor air pollution is primarily regulated by the USEPA at the federal level and the Air Quality Division (AQD) of the MDEQ at the state level. The following federal and state contacts can provide additional information about how outdoor air quality is achieved or maintained in Michigan:

- U.S. Environmental Protection Agency, Region 5  
Office of Air and Radiation  
77 W. Jackson Blvd.  
Chicago, IL 60604  
Telephone: (800) 621-8431  
[www.epa.gov/oar](http://www.epa.gov/oar)
- Michigan Department of Environmental Quality  
Air Quality Division  
525 W. Allegan St. - Constitution Hall, 3<sup>rd</sup> Floor North  
P.O. Box 30260  
Lansing, Michigan 48909  
Telephone: (517) 373-7023  
[www.michigan.gov/deqair](http://www.michigan.gov/deqair)

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### INDOOR AIR QUALITY CONSULTANTS

The diagnostic activities conducted by indoor air quality consultants often differ from outdoor consultants in that they are more complex in nature, with air sampling that takes place in a constantly changing indoor environment. Controlling indoor air quality involves integrating three main strategies which include:

- Managing the sources of pollutants either by removing them from the building or isolating them from people through physical barriers, air pressure relationships, or by controlling the timing of their use.
- Diluting pollutants and removing them from the building through ventilation.
- Using filtration to clean the air of pollutants.

Air quality consultants that handle most indoor-related air pollution are called **Industrial Hygienists**. These indoor air quality consultants are highly trained air quality professionals who monitor the workplace or home for exposure to environmental hazards (i.e., airborne contaminants) that could adversely affect human health over a period of time. Using specialized equipment, an industrial hygienist collects samples of air contaminants to determine if a hazardous exposure has occurred or currently exists and makes recommendations for improvement based on the results of these samples. Some of these recommendations include such things as employee monitoring programs in the workplace, equipment redesign, or system modifications designed to achieve federal, state, and local indoor air quality compliance.

Air quality professionals who are qualified to conduct work in the industrial hygiene field have extensive training in ventilation engineering, environmental health, toxicology, and microbiology. Industrial hygienists help determine the existence of:

- Air contaminants such as asbestos, mold, lead, radon, and formaldehyde, as well as other toxic substances or biological agents.
- Problems with air exchanges in building ventilation systems.
- Health hazards (i.e., excessive vibrations to the body).
- Excessive or damaging noise levels.
- Heat and cold stress.

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- Work-related ergonomic problems (i.e., injury prevention through proper design of the workplace so that it accommodates human capabilities).

Additionally, industrial hygienists can also assist with:

- The selection of personal protection equipment.
- The establishment of an on-site industrial hygiene program.

An industrial hygienist may operate independently or be affiliated with a larger environmental, health, and safety consulting company.

### **REGULATION OF INDOOR AIR POLLUTION**

Indoor air quality, especially as it relates to the occupational health and safety of workers in business and industry, is regulated by the federal Occupational Safety and Health Administration (OSHA) and the Michigan Department of Labor and Economic Growth, Bureau of Safety and Regulation (Michigan's OSHA or MIOSHA). There is no agency that regulates indoor air quality in privately held homes. To better understand how to maintain proper indoor air quality, the following agencies can be contacted for more information:

- Indoor Air Quality Information Clearinghouse (created and supported by the USEPA)  
IAQ INFO  
P.O. Box 37133  
Washington DC 20013-7133  
Telephone: (800) 438-4318  
[www.epa.gov/iaq/iaqinfo.html](http://www.epa.gov/iaq/iaqinfo.html)
- OSHA  
Office of Outreach Services and Alliances  
Directorate of Cooperative and State Programs  
200 Constitution Avenue, NW  
Room N-3700  
Washington, DC 20210  
(202) 693-2340  
[www.osha.gov](http://www.osha.gov)

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- Michigan Department of Labor and Economic Growth  
Bureau of Safety and Regulation - MIOSHA  
P.O. Box 30643  
7150 Harris Drive  
Lansing, Michigan 48909-8143  
Telephone: (800) 866-4674  
[www.michigan.gov/dleg](http://www.michigan.gov/dleg)

### **DIAGNOSTIC TESTING AND SAMPLE ANALYSIS (INDOOR AND OUTDOOR AIR POLLUTION)**

An important and complementary component of both indoor and outdoor air pollution is the process of sample analysis, often completed by an **analytical laboratory**. Analytical laboratories are defined as those that receive samples from source testing companies (such as a "stack" tester or an industrial hygienist) in order to track, test, or verify the contents and volume of an air sample or contaminant. Analytical laboratories can also be used to evaluate samples of fuels or paints for concentrations of potential air pollutants. Analytical laboratories can conduct the following types of testing services:

- Determining the concentration of air pollutants in a collected sample
- Analyzing fuel for British Thermal Unit (BTU) content, ash content, and sulfur presence in coal, oil, etc.
- Determining the presence and concentration of mal odors
- Determining the presence of bacteria and fungus, chemicals, gases, dust, asbestos, and fumes
- Analyzing paint coating samples to determine the percentage by weight and volume of solids, VOCs, exempt VOCs, water content, and paint density

Laboratories conducting outdoor air quality analyses should be able to meet all relevant USEPA program requirements, including quality assurance/quality control, proper use of specified methods, and other analytical measurement criteria. Laboratories conducting indoor air quality analyses should meet all relevant quality assurance/quality control criteria for each respective industrial hygiene, environmental lead, or environmental microbiology lab accreditation program.

Addressing the cause of a specific air pollution problem can sometimes be a very challenging task. Therefore, it is important to have an understanding of when an air quality consultant is most often used, the different types of air quality consultants that exist, and what types of services or expertise each can provide. In most cases, deciding to seek the services of an air quality consultant will depend largely on:

- Whether an independent opinion is needed.
- If an individual or business is at an impasse on an environmental, health, or safety issue.
- Whether internal resources within a business exist to adequately address the issue.

Most often, air quality consultants are used to:

- Supplement existing staff or a business knowledge base.
- Provide technical or economic analyses (e.g., quality assurance of company data/reports).
- Develop alternatives and make recommendations (i.e., site remediation).
- Complete a one-time project.
- Assist with equipment selection or purchase, installation, and start-up.
- Complete annual tasks such as facility audits, emissions inventory reporting, permit applications, emissions testing, indoor air quality testing, etc.
- Negotiate or enforce environmental, safety, or health compliance.
- Provide engineering support through studies, design, and construction assistance.